# Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

# STATEMENT OF BASIS

Columbia Gulf Transmission Company Alexandria Compressor Station Deville, Rapides Parish, Louisiana Agency Interest Number: 44779 Activity Number: PER20080001 Proposed Permit Number: 2360-00075-V3

#### I. APPLICANT

Company:

Columbia Gulf Transmission Company - Alexandria Compressor Station 950 Manifold Rd Washington, Pennsylvania 15301

Facility:

Columbia Gulf Transmission Company
7666 Hickory Grove Loop
Deville, Rapides Parish, Louisiana
Approximate UTM coordinates are 573.0 kilometers East and 3477.2 kilometers
North, Zone 15

# II. FACILITY AND CURRENT PERMIT STATUS

At Alexandria Station, natural gas is received from upstream compressor stations via gas pipelines, compressed, and pumped into outlet station pipelines for transmission to a downstream station.

Incoming gas is compressed using four 3,500-hp compressor engines, EQT2-EQT5, which can operate at greater than nameplate hp, and normally operate at around 4,400 hp. There are also two gas-fired turbines, EQT6 and EQT7; two emergency generators, EQT8 and EQT9; a firewater pump engine, EQT10; and two tanks, EQT11 and EQT12. The turbines can operate up to 160 percent of their nameplate (NEMA) rating. The facility also has a halon fire suppressant system regulated by 40 CFR 82 Subpart E.

Columbia Gulf Transmission Company - Alexandria Compressor Station is a designated Part 70 source. The current Part 70 permit which has been issued to the facility is as follows:

Permit No.	Unit or Source	Date Issued
2360-00075-V2	Alexandria Compressor Station	04/29/2005

# III. PROPOSED PROJECT/PERMIT INFORMATION

#### **Application**

A permit application was submitted on October 30, 2008 requesting a Part 70 operating permit renewal for the Alexandria Compressor Station.

# **Project**

Columbia Gulf Transmission Company - Alexandria Compressor Station is renewing the Regular Title V permit.

# **Proposed Permit**

Permit 2360-00075-V3 will be the renewal of Part 70 operating permit 2360-00075-V2 for the Alexandria Compressor Station.

# **Permitted Air Emissions**

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change #
PM <sub>10</sub>	3.10	3.12	+0.02
SO <sub>2</sub>	1.50	1.53	+0.03.
$NO_X$	3138.80	3151.70	+12.90
CO	596.00	621.35	+25.35
VOC *	76.90	77.63	+0.73
*Formaldehyde	31.00	30.42	-0.58
*Benzene		0.25	+0.25
*Acetaldehyde	-	4.62	+4.62
*Acrolein	•	2.86	+2.86
*n-Hexane	-	0.60	+0.60

These changes are due to rounding errors in the emission calculations and increasing the potential to emit for Source G27 (EQT009) based on an operating time of 2000 hrs/yr instead of only 50 hrs/yr. The TAPs are only a result of including VOC speciation for the facilities' engines.

#### IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

# Applicability and Exemptions of Selected Subject Items

See section XI table 2 of permit.

# Prevention of Significant Deterioration/Nonattainment Review

This permit was reviewed for compliance with 40 CFR 70 and the Louisiana Air Quality Regulations. Prevention of Significant Deterioration (PSD), New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) do not apply. This facility is a minor source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. Emissions of formaldehyde are exempt per LAC 33:III.5105. B.3.a. The facility is a major source of Hazardous Air Pollutants.

# Streamlined Equipment Leak Monitoring Program

None

#### **MACT Requirements**

None

#### Air Quality Analysis

Emissions associated with the proposed facility were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

#### General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

# **Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

#### V. PERMIT SHIELD

None

# VI. PERIODIC MONITORING

All periodic monitoring is conducted in accordance with state and federal regulations. See the Specific Requirements Section of the proposed permit for monitoring requirements.

#### VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide  $(H_2S)$  – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO<sub>X</sub>) - Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane ( $CH_4$ ), Ethane ( $C_2H_6$ ), Carbon Disulfide ( $CS_2$ )

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit:  $\geq 10$  tons per year of any toxic air pollutant;  $\geq 25$  tons of total toxic air pollutants; and  $\geq 100$  tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM<sub>10</sub> – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air

Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO<sub>2</sub>) – An oxide of sulfur.

Sulfuric Acid  $(H_2SO_4)$  – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.

# PUBLIC NOTICE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ) COLUMBIA GULF TRANSMISSION COMPANY ALEXANDRIA COMPRESSOR STATION PROPOSED REGULAR TITLE V RENEWAL

The LDEQ, Office of Environmental Services, is accepting written comments on the regular title V renewal for Columbia Gulf Transmission Company, 950 Manifold Rd, Washington PA 15301 for the Alexandria Compressor Station. The facility is located at 7666 Hickory Grove Loop, Deville, LA, in Rapides Parish.

Columbia Gulf Transmission Company requested a part 70 operating permit renewal.

Estimated emissions in tons per year are as follows:

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<sup>#</sup> These changes are due to rounding errors in the emission calculations and increasing the potential to emit for Source G27 (EQT009) based on an operating time of 2000 hrs/yr instead of only 50 hrs/yr. The TAP emissions are only a result of including the VOC speciation for the facilities' engines.

A technical review of the working draft of the proposed permit was submitted to the facility representative and the LDEQ Surveillance Division. Any remarks received during the technical review will be addressed in the "Worksheet for Technical Review of Working Draft of Proposed Permit". All remarks received by LDEQ are included in the record that is available for public review.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. Written comments and/or written requests must be received by 12:30 p.m., DAY, MONTH DATE, YEAR. Written comments will be considered prior to a final permit decision

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The air permit application, draft permit and statement of basis are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5<sup>th</sup> Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.

Additional copies may be reviewed at NAME AND PHYSICAL ADDRESS OF LIBRARY OR OTHER REPOSITORY.

Inquiries or requests for additional information regarding this permit action should be directed to Scott J. Templet, LDEQ, Air Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3059.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at <a href="mailto:deqmailtistrequest@la.gov">deqmailtistrequest@la.gov</a> or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the proposed permit and statement of basis can be viewed at the LDEQ permits public notice webpage at <a href="www.deq.louisiana.gov/apps/pubNotice/default.asp">www.deq.louisiana.gov/apps/pubNotice/default.asp</a> and general information related to the public participation in permitting activities can be viewed at <a href="www.deq.louisiana.gov/portal/tabid/2198/Default.aspx">www.deq.louisiana.gov/portal/tabid/2198/Default.aspx</a>.

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at <a href="http://www.doa.louisiana.gov/ocs/listservpage/ldcq\_pn\_listserv.htm">http://www.doa.louisiana.gov/ocs/listservpage/ldcq\_pn\_listserv.htm</a>.

All correspondence should specify AI Number 44779, Permit Number 2360-00075-V3, and Activity Number PER20080001.